



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,199	03/01/2005	Gerard Cnossen	SG 020017	7053
24737 7590 07/12/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
			EXAMINER PENG, KUO LIANG	
			ART UNIT 1712	PAPER NUMBER
			MAIL DATE 07/12/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/526,199	Applicant(s) CNOSSEN ET AL.	
	Examiner Kuo-Liang Peng	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 4/27/07 Amendment.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The Applicants' amendment filed April 27, 2007 is acknowledged. Claim 8 is deleted. Claims 1-7 and 9-14 are amended. Claims 15-21 are added. Now, Claims 1-7 and 9-21 are pending.
2. Claim objection(s) in the previous Office Action (Paper No. 020307) is/are removed.
3. Claim rejection(s) under 35 USC 112 in the previous Office Action (Paper No. 020307) is/are removed.
4. Claim rejection(s) (Claims 1-7) under 35 USC 102 or 35 USC 103 in the previous Office Action (Paper No. 020307) is/are removed.
5. The text of those sections of Title 35, U.S. code not included in this action can be found in prior Office Action(s).

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Examiner is not able to find a basis for “oxidized metal” in general in the specification originally filed.

***Claim Rejections - 35 USC § 102 and 103***

8. Claims 9-17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rouquier (WO 01/23639).

The following column and line numbers are based on Rouquier’s U.S. equivalent, US 6 656 607.

For Claims 15 and 17, Rouquier discloses a coating composition containing a hybrid sol-gel precursor, particles and as a thickener, a cellulose. The cellulose can be hydroxypropylmethylcellulose. (col. 1, lines 24-29, col. 2, line 54 to col. 3, line 41 and col. 4, lines 29-39) Rouquier is silent on a layer prepared by screen-printing method. However, these claims are Product-by-Process claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" *In re Thorpe*, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710

F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983) "[T]he lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972).

For Claim 16, the term "decorative" is merely an intended use, which does not carry any weight of patentability. For Claims 9-14, Rouquier teaches the use of the composition for coating metal substrates. (Abstract) Furthermore, since the composition reads on the claimed one, it should be suitable for coating the claimed substrates set forth in the instant claims.

9. Claims 1-4 and 18-20 are rejected under 35 U.S.C. 102(b) as anticipated by Kanamori (US 2002/0007006).

The following column and line numbers are based on the US patent (US 6 756 124) issued to Kanamori.

Kanamori discloses a coating composition comprising a **hybrid sol-gel precursor, pigment particles** such as TiO<sub>2</sub>, Ni-Zn ferrite (Zn Fe<sub>2</sub>O<sub>4</sub>), organic pigment, etc. and **cellulose derivatives**, such as HPMC, etc. (col. 3, lines 39-63, col. 4, lines 44-60, col. 7, lines 44-46, col. 9, line 65 to col. 10, line 5, col. 21, line 25 to col. 22, line 67 and Examples) The preamble “suitable for screen-printing” is merely an intended use, and does not carry any weight of patentability.

10. Claims 5-7, 9-17 and 21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kanamori.

For Claims 5-7, 9-15, 17 and 21, Kanamori discloses a coating composition, *supra*, which is incorporated herein by reference. Kanamori further teaches applied the composition with the specific thicknesses on the substrates as described in col. 26, lines 12-43. Since the composition is substantially the same as that of the claimed one and the curing mechanism is the same as that of claimed one, both

resulting coating layers should have similar properties, i.e., substantially dense layers. Furthermore, since the composition can be coated on the substrates such as metals, glass, plastics, etc., (col. 26, lines 29-43), it should be suitable for coating the claimed articles. Kanamori is silent on the coating layer being formed by screen-printing technique. However, these claims are Product-by-Process claims.

“Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process” *In re Thorpe*, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

"The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710



F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983) "[T]he lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972). For Claim 16, the term "decorative" is merely an intended use, which does not carry any weight of patentability.

11. Claims 1, 3-5, 7, 9-19 and 21 are rejected under 35 U.S.C. 102(b) as anticipated by Kalleder (WO 01/23190).

The following column and line numbers are based on Kalleder's U.S. equivalent, US 6 863 923.

Kalleder discloses a substrate including a screen-printed marking formed thereon utilizing a composition containing a hybrid sol-gel precursor, inorganic/organic pigment particles, such as TiO<sub>2</sub>, etc. and a cellulose derivative. The substrates can be metals, plastics, ceramics, glass, etc. (col. 1, lines 4-30, col. 2, lines 11-28, col. 2, line 58 to col. 3, line 21, col. 4, line 63 to col. 5, line 24, col. 5, lines 56-65 and Examples) Since the composition reads on the claimed one, the layers derived therefrom should inherently have the same density. Furthermore, since the composition and substrates read on the claimed ones, it should be suitable for coating the substrates of the claimed articles. The composition can be suitable for decorative applications. (col. 6, lines 17-27)

12. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalleder in view of Rouquier (WO 01/23639/US 6 656 607).

Kalleder discloses a composition for screen-printing, *supra*, which is incorporated herein by reference. Kalleder further teaches the use of cellulose derivatives such as **hydroxypropylcellulose** as a **rheology control** agent. (col. 5, lines 56-65 and Examples) Kalleder is silent on the use of HPMC. However, Rouquier teaches the equivalency and interchanability of the use of cellulose derivatives such as **HPMC** and **hydroxypropylcellulose** in a coating composition

comprising a hybrid sol-gel precursor and pigment particles, *supra*. The motivation of using these cellulose derivatives is to adjust the viscosity (i.e., as a thickener) of the composition. (col. 3, lines 19-41) In light of which, it would have been obvious to one of ordinary skill in the art at the time of invention was made to incorporate **HPMC** in Kalleder's composition with expected success.

13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalleder.

Kalleder discloses a substrate including a screen-printed marking formed thereon utilizing a composition containing a hybrid sol-gel precursor, inorganic/organic pigment particles, such as TiO<sub>2</sub>, etc. and a cellulose derivative, *supra*, which is incorporated herein by reference. Kalleder teaches that the coating can be suitable for decorative applications. (col. 6, lines 17-27) Kalleder is silent on the thickness of the coated layer. However, the layer thickness can affect the durability of the coating. In other words, the layer thickness is a Result-Effective variable. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to apply a layer with whatever thickness through routine experimentation in order to afford a layer with desired durability. Especially, Applicants do not show the criticality of the layer thickness. See MPEP 2112.01

***Responsive to arguments regarding 35 USC § 102 and 103 rejection***

14. Applicant's arguments have been fully considered but they are not moot in view of the rejection set forth above.


15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp

June 5, 2007

  
Kuo-Liang Peng  
Primary Examiner  
Art Unit 1712